VICTOR®

ACETYLENE

CUTTING TIP CHART
Cutting Tip Series 1-101 and 3-101

Metal Thickness	Tip Size	Cutting Oxygen (PSIG)***	Preheat Oxygen (PSIG)*	Acetylene Pressure (PSIG)	Speed I.P.M.	Kerf Width
1/8"	000	20/25	3/5	3/5	20/30	.04
1/4"	00	20/25	3/5	3/5	27/30	.05
3/8"	0	25/30	3/5	3/5	24/28	.06
1/2"	0	30/35	3/6	3/5	20/24	.06
3/4"	1	30/35	4/7	3/5	17/21	.07
1"	2	35/40	4/8	3/6	15/19	.09
2"	3	40/45	5/10	4/8	12/15	.11
3"	4	40/50	5/10	5/11	9/12	.12
4"	5	45/55	6/12	6/13	8/11	.15
6"	6**	45/55	6/15	8/14	6/8	.15
10"	7**	45/55	6/20	10/15	4/5	.34
12"	8**	45/55	7/25	10/15	3/5	.41

** Applicable for 3-hose machine cutting torches only. With a 2-hose cutting torch, preheat pressure is set by the cutting oxygen.*

*** For best results use appropriate capacity torches and 3/8" hose when using tip size 6 or larger. Torches with flashback arrestors require up to 25% more pressure as tip size increases (15 PSI maximum acetylene pressure).*

**** All pressures are measured at the regulator using a 25' X 3/8" hose for tip size 6 and larger.*

⚠ CAUTION

At no time should the withdrawal rate of an individual acetylene cylinder exceed 1/7 of the cylinder contents per hour. If additional flow capacity is required, use an acetylene manifold system of sufficient size to supply the necessary volume.

WELDING NOZZLE FLOW DATA

Metal Thickness	Tip Size	Drill Size	Oxygen Pressure (PSIG)		Acetylene Pressure (PSIG)		Acetylene Consumption (SCFH)	
			Min	Max	Min	Max	Min	Max
Up to 1/32"	000	75 (.022)	3	5	3	5	1	2
1/16" - 3/64"	00	70 (.028)	3	5	3	5	1 1/2	3
1/32" - 5/64"	0	65 (.035)	3	5	3	5	2	4
3/64" - 3/32"	1	60 (.040)	3	5	3	5	3	6
1/16" - 1/8"	2	56 (.046)	3	5	3	5	5	10
1/8" - 3/16"	3	53 (.060)	4	7	3	6	8	18
3/16" - 1/4"	4	49 (.073)	5	10	4	7	10	25
1/4" - 1/2"	5	43 (.089)	6	12	5	8	15	35
1/2" - 3/4"	6	36 (.106)	7	14	6	9	25	45
3/4" - 1 1/4"	7	30 (.128)	8	16	8	10	30	60
1 1/4" - 2"	8	29 (.136)	10	19	9	12	35	75
2 1/2" - 3"	10	27 (.144)	12	24	12	15	50	100
3 1/2" - 4"	12*	25 (.149)	18	28	12	15	80	160

MFA HEATING NOZZLES

Tip Size	Acetylene Pressure Range PSIG	Oxygen Pressure Range PSIG	Acetylene ft³/hr		Oxygen ft³/hr		BTU per Hour
			Min	Max	Min	Max	
4	6 - 10	8 - 12	6	20	7	22	SEE BELOW **
6	8 - 12	10 - 15	14	40	15	44	
8	10 - 15	20 - 30	30	80	33	88	
10	12 - 15	30 - 40	40	100	44	110	
12*	12 - 15	50 - 60	60	150	66	165	
15*	12 - 15	50 - 60	90	220	99	244	

** Use model HD310C torch and 3/8" hose.*

*** Approximately 1470 gross BTU per cubic foot.*

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